

6 a coating disposed over at least a portion of a surface of the conical portion
7 of the orifice,

8 wherein the coating is a polymer disposed along an interior surface of the
9 orifice and one of i) an Alumina, ii) Si_3N_4 , iii) silica, iv) a combination of 12% silica and
10 88% Alumina, and v) a Diamond like coating (DLC) disposed along an exterior portion of
11 the orifice.

1 10. (Twice Amended) A bonding tool for bonding a wire to a substrate,
2 the bonding tool having a body and a working tip coupled to one end of the body, and
3 comprising:

03 4 an orifice extending along a longitudinal axis of the body and the working tip
5 and having a conical portion adjacent the working tip; and

6 a polymer coating disposed over at least a portion of a surface of the conical
7 portion of the orifice,

8 wherein the coating has a substantially uniform thickness of up to about 2.0
9 microns.

1 28. (Amended) A bonding tool for bonding a wire to a substrate, the
2 bonding tool having a body and a working tip coupled to one end of the body, and
3 comprising:

04 4 an orifice extending along a longitudinal axis of the body and the working
5 tip and having a conical portion adjacent the working tip; and

6 a polymer non-conductive coating disposed over at least a portion of a
7 surface of the conical portion of the orifice.
